

## **Abstract**

The Massachusetts Department of Public Health (MDPH) proposes activities in specific areas which will build epidemiology, laboratory and health information systems capacity at state and local health department levels in Massachusetts. The areas targeted and the proposed activities are described below.

### **National Electronic Disease Surveillance System**

*Massachusetts will continue to develop, deploy and maintain the Massachusetts Virtual Epidemiologic Network (MAVEN). MAVEN allows the direct reporting of notifiable disease by clinicians and local public health to MDPH, appropriate data-sharing between state and local public health, and improved data management and analysis. Massachusetts will also continue to assist all hospital and commercial laboratories in developing or maintaining the capability to transmit laboratory reports electronically to MDPH.*

### **Foodborne Illness**

*Proposed activities focus on the following:*

- Enhanced reporting of enteric disease outbreaks.
- Enhanced capacity for the detection, investigation and control of enteric disease outbreaks.
- Maintenance and further development of near real-time DNA “fingerprinting” of foodborne pathogenic bacteria.
- Increased surveillance for Shiga toxin-producing bacteria.
- Capacity development for the detection, identification and further characterization of human caliciviruses.
- Continued participation in the National Antimicrobial Resistance Monitoring System.
- The development of a surveillance program for the detection of foodborne pathogens in retail raw meat samples.

### **Healthcare-Associated Infections**

*Massachusetts will build on state programs to prevent health-care associated infections by:*

- Exploring solutions to allow for the electronic reporting of healthcare-associated infections.
- Promoting antibiotic stewardship in long term care facilities to decrease antimicrobial resistance and Clostridium difficile infections in those settings.
- Identifying cost-effective and evidence-based healthcare-associated infections intervention strategies.

### **Arboviral Diseases**

*Massachusetts will maintain and expand its arbovirus surveillance program. Activities will include human and environmental surveillance and the provision of timely updates on arbovirus transmission to local jurisdictions to assist with the implementation of vector management and the dissemination of appropriate prevention and educational information to the public.*

**Lyme Disease**

*Massachusetts will pursue more complete information on all cases of Lyme disease identified in Massachusetts and the development of electronic mechanisms for reporting. An annual surveillance summary will be available to all local jurisdictions, to healthcare providers through the Massachusetts Medical Society and posted on the MDPH website.*

**Influenza**

*Massachusetts will continue building, validating and improving upon its well-established influenza surveillance and testing program. This will include continued participation in the US Outpatient Influenza-like Illness Surveillance Network to monitor timing and intensity of influenza activity throughout the season.*

**Rabies**

*Massachusetts Bureau of Laboratory Science will add molecular diagnostic capability to its current rabies specimen testing protocol.*

**Tickborne Diseases**

*Massachusetts will build and/or expand epidemiological capacity to measure burden, trends, and to track emergence of tickborne diseases, including: babesiosis, human granulocytic anaplasmosis, human monocytic ehrlichiosis, Rocky Mountain spotted fever, Southern tick-associated rash illness, tick-borne relapsing fever, and tularemia.*

**Waterborne Diseases**

*Massachusetts will enhance swimming pool testing to assess whether current chlorine residuals standards are effective in keeping E. coli levels below bathing standards.*